

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-56 were pending. Claims 1, 2, 10-13, 21-24, 32-36, 44-47, 55 and 56 were rejected. Claims 3-9, 14-20, 25-31, 37-43 and 48-54 were objected to.

Claims 1, 12, 23, 34, 46, and 48 have been amended. Claim 35 has been canceled. No claims have been added. Support for the amendments is found in the specification, the drawings, and in the claims as originally filed. Applicant submits that the amendments do not add new matter.

Rejections Under 35 U.S.C. § 102

Claims 1, 2, 11-13, 22-24, 33, 46, 47 and 56 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Marchisio of U.S. Patent No. 6,862,710 ("Marchisio").

Applicant has amended claim 1 to specifically point out that adapting the LSA space is performed to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors of the LSA space.

Marchisio discloses an information retrieval system that computes the similarity between the information files and the user query. More specifically, Marchisio discloses

At step 6 of FIG. 1, the disclosed system generates a term-document matrix (also referred to as "information matrix") based on the contents of the electronic document files parsed at step 5. In one embodiment, the value of each cell in the term-document matrix generated at step 6 indicates the number of occurrences of the respective term indicated by the row of the cell, within the respective one of the electronic information files indicated by the column of the cell. Alternatively, the values of the cells in the term-document matrix may reflect the presence or absence of the respective term in the respective electronic information file.

(Marchisio, col. 6, lines 52-62) (emphasis added)

Importantly, Marchisio discloses

Specifically, at step 10, for each phrase in the user query, the disclosed system adds a new row to the term-document matrix, where each cell in the new row contains the frequency of occurrence of the phrase within the respective electronic information file, as determined by the frequencies of occurrence of individual terms composing the phrase and the proximity of such concepts, as determined by their relative positions in the electronic information files, as indicated by the elements of the auxiliary data structure. In this way the auxiliary data structure permits reforming of the term-document matrix to include rows corresponding to phrases in the user query for the purposes of processing that query. Rows added to the term-document matrix for handling of phrases in a user query are removed after the user query has been processed.

(Marchisio, col. 7, lines 43-61) (emphasis added)

Thus, Marchisio merely discloses for each phrase in the user query, adding a new row to the term-document matrix of the information files, in contrast to changing a position of the one or more document vectors of the LSA space, as recited in amended claim 1. As such, Marchisio fails to disclose the limitations of amended claim 1 of adapting the LSA space to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors.

Furthermore, Marchisio does not suggest to adapt an LSA space to reflect the change in the language, as recited in amended claim 1. In contrast, Marchisio discloses that rows added to the term-document matrix are removed after the user query has been processed.

Because Marchisio does not set forth all the limitations of amended claim 1, Applicant respectfully submits that amended claim 1 is not anticipated by Marchisio under 35 U.S.C. 102(e).

Because amended independent claims 12, 23, 34, and 46 contain at least the same limitations as discussed above with respect to amended claim 1, Applicant respectfully submits that amended claims 12, 23, 34, and 46 are likewise not anticipated by Marchisio under 35 U.S.C. 102(e).

Given that claims 2-11, 13-22, 24-33, 36-45, and 47-56 depend, directly or indirectly, from amended independent claims 12, 23, 34, and 46 respectively, and add additional limitations, Applicant respectfully submits that claims 2-11, 13-22, 24-33, 36-45, and 47-56 are likewise not anticipated by Marchisio under 35 U.S.C. 102(e).

Rejections Under 35 U.S.C. § 103

Claims 10, 21, 32 and 55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Marchisio, in view of U.S. Patent No. 6,289,353 of Hazlehurst et al., ("Hazlehurst"). With respect to amended claim 1, as set forth above, Marchisio fails to disclose, teach, or suggest adapting the LSA space to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors.

Hazlehurst discloses generating multiple vector spaces based upon user feedback, changes in user profiles, and new sources of information (new documents) (col. 5, lines 45-47). More specifically, Hazlehurst discloses

Vector spaces 35 and 37 include a subset of the original documents in vector space 36 plus new documents added over time. For example, in response to a need demonstrated by user feedback to better represent the concepts "AIDS" and "cancer," an individual collator in the collator population will specialize to better cover those concepts, resulting in emergence of vector space 35 or 37, respectively. Further user interest 38 demonstrated regarding part of the concept "breast cancer" will cause further specialization of an individual collator in the collator population, resulting in emergence of vector space 39.

(Hazlehurst, col. 5, lines 50-60) (emphasis added)

Thus, Hazlehurst discloses generating new vector spaces 35 and 37 that include the subset of the original documents in the original vector space 36 plus new documents, in contrast to adapting the same LSA space to reflect the change in the language, wherein the change in the

language includes changing a position of the one or more document vectors of the LSA space, as recited in amended claim 1.

Thus, neither Marchisio, nor Hazlehurst discloses, teaches, or suggests such limitations of amended claim 1.

Therefore, Applicant respectfully submits that amended claim 1 is not obvious under 35 U.S.C. § 103(a) over Marchisio, in view of Hazlehurst.

Given that amended independent claims 12, 23, and 46 contain at least the discussed above limitations of amended claim 1, Applicant respectfully submits that claims 12, 23, and 46 are likewise not obvious under 35 U.S.C. § 103(a) over Marchisio, in view of Hazlehurst.

Given that claims 10, 21, 32 and 55 depend from amended independent claims 1, 12, 23, and 46 respectively, and add additional limitations, Applicant respectfully submits that claims 10, 21, 32 and 55 are likewise not obvious under 35 U.S.C. § 103 (a) over Marchisio, in view of Hazlehurst.

Claims 34-36 and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Marchisio, in view of U.S. Patent No. 6,356,864 of Foltz et al., (“Foltz”).

Applicant has amended claim 34 to include means for adapting the LSA space to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors.

As set forth above, Marchisio fails to disclose such limitations of amended claim 34.

Foltz merely discloses generating the pseudo-vector representation of the ungraded sample text and comparing the pseudo-vector representation of the ungraded sample text to the vector representation of the standard text (col. 11, lines 40-45) in contrast to means for adapting

the LSA space to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors, as recited in amended claim 34.

Thus, neither Marchisio, nor Foltz discloses, teaches, or suggests such limitations of amended claim 34.

Therefore, Applicant respectfully submits that amended claim 34 is not obvious under 35 U.S.C. § 103 (a) over Marchisio, in view of Foltz.

Given that claims 35-36, and 45 depend from amended independent claim 34, and add additional limitations, Applicant respectfully submits that claims 35-36, and 45 are likewise not obvious under 35 U.S.C. § 103 (a) over Marchisio, in view of Foltz.

Claim 44 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Marchisio in view of Foltz and further view of Hazlehurst.

With respect to amended claim 34, as set forth above, neither Marchisio, Hazlehurst. nor Foltz discloses, teaches, or suggests the limitations of amended claim 34 of means for adapting the LSA space to reflect the change in the language, wherein the change in the language includes changing a position of the one or more document vectors.

Given that claim 44 depends from amended independent claim 34, and add additional limitations, Applicant respectfully submits that claim 44 is likewise not obvious under 35 U.S.C. § 103 (a) over Marchisio, in view of Foltz, and further view of Hazlehurst.

Allowable Subject Matter

Applicant notes with appreciation the Examiner's allowance of the claims 3-9, 14-20, 25-31, 37-43, and 48-54, if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

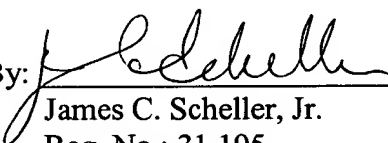
Applicant here elects not to place the limitations of the allowed claims into their corresponding independent claims because Applicant respectfully submits that the amended independent claims 1, 12, 23, 34, and 46 are in condition for allowance.

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 9/22/2005

By: 
James C. Scheller, Jr.
Reg. No.: 31,195

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(408) 720-8300